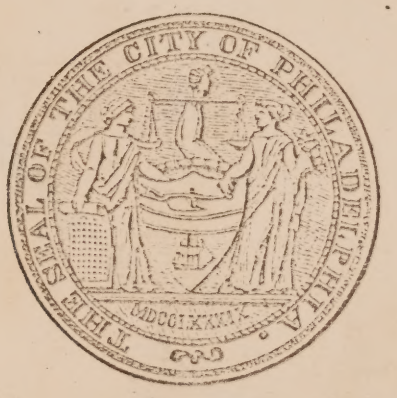
MANUFACTURES

OF THE

CITY OF PHILADELPHIA.



CENSUS OF 1870.

TORAGE

PHILADELPHIA:
KING & BAIRD, PRINTERS, Nos. 607 AND 609 SANSOM STREET.
1872.

317.481
P531.2

LIBRARY
OF THE
UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA

MANUFACTURES

OF THE

CITY OF PHILADELPHIA.

City council

CENSUS OF 1870.

PHILADELPHIA:
KING & BAIRD, PRINTERS, Nos. 607 AND 609 SANSOM STREET.
1872.

Manufactures of the City of Philadelphia.

To the Select and Common Councils

of the City of Philadelphia:

GENTLEMEN:

Your Joint Special Committee, appointed November 11th, 1869, on the Revision of the United States Census in this City, respectfully report: That in the report made by your Committee on the 17th day of November, 1870 (Appendix to the Journal of Common Council, page 199), regarding the population of our City, reference was made as to the necessity of reviewing the statistics of our manufacturers, and on the 28th December, 1871, a further report of our labors was submitted (Appendix to the Journal of Common Council, page 459). We now have the gratification of presenting a very full tabular statement of the results of the important department of that census, relating to manufactures, and have obtained the assent of the Superintendent of the Census to its publication at this time. As the chief object and most practical conclusion of our labors are thus obtained, we congratulate the people of Philadelphia, not only on the liberality of the action of the authorities at Washington, which, with the generous aid afforded by Councils, has enabled us to reach this end, but still more on the magnitude and importance of the results themselves.

Before proceeding to explain these statements, it is due to the Committee, and to the City authorities, to state some of the circumstances attending this revision. In endeavoring to secure a thorough and complete correction of the census of manufactures, or of industrial establishments, as they are described in the forms, the Committee found a much greater task in hand than was at first expected; and indeed, a work that seemed almost to increase in magnitude as it proceeded. The reason for this was,

that instead of being simply required to obtain returns from a moderately large number of establishments, it was found requisite to re-examine all, or nearly all, and to verify and correct thousands of returns not counted in the additions now made to the results of the first canvass. The number of establishments originally wholly omitted, for which the complete returns were obtained and incorporated in the official census up to December 4th last, WAS TWO THOUSAND ONE HUNDRED AND NINETY-NINE (2,199), the production of which AVERAGED NEARLY FIFTY THOUSAND (50,000) DOLLARS EACH.

To permit such an official statement of the manufacturing industry of this City to go forth, and to stand for ten years as the representative of its business, would be a very serious injury to its credit and its business. At the outset of the labors of this Committee, the expectation was that perhaps only thirty or forty millions of dollars would measure the extent of the deficiency, but the result, as we proceed to show, has been far different.

The peculiar interest the City has, at this time, in securing the incorporation of a faithful account of its manufacturing industry in the national census, has induced us to ask unusual powers, and to make unusual efforts in aid of the work assigned to us. From the earliest moment at which any action could be of service, this Committee has been organized, and while occupied for a considerable time with the correction of the population returns, it was found impossible to do more in that direction than to secure a recount, which was still not satisfactory, in consequence of the inherent defects of the United States census laws themselves. The result of that effort was, however, to add liberally to the first report of population, a partial correction, but not by any means a complete one, as we believe that our population would, if correctly enumerated, amount to nearly eight hundred thousand souls.

The industrial census, however, offered a better opportunity for useful service in the revision which the present imperfect census laws rendered necessary, and General F. A. Walker, Superintendent of the Census, very liberally and fairly solicited the fullest aid that could be afforded in making these returns complete. General Gregory, late United States Marshal, also very readily aided the revision, and Mr. Lorin Blodget, of this city, was commissioned by the Department of the Interior with full authority to obtain returns under the census laws, and to make a complete revision of the schedules already forwarded, as well as to prepare supplemental returns, embracing everything not included in the first canvass.

Finally, the complete returns show an addition of more than twenty-three hundred manufacturing establishments, having an average production for the census year of about fifty thousand dollars each; making a total of more than one hundred millions of dollars. This vast sum has been restored to our account of manufactures to a great extent through the agency of this Committee, and the official census statistics which are to represent us for the next decade, are made as full and faithful as is possible in such a case.

The Committee feel assured that no citizen will regret the time or the small expense devoted to repairing what would have been so great a misfortune as the omission of these results from the census. The result of incorporating them must also be peculiarly gratifying to those who hope for the permanent prosperity of the City. There can be no doubt now of

the position we hold above all other cities of the United States, and probably of the world, in manufacturing ascendency. The total number of manufacturing establishments was, for the United States census year ending June 1st, 1870, about EIGHT THOUSAND FIVE HUNDRED, and the value of their products for that year was about

THREE HUNDRED AND THIRTY-FIVE MILLIONS OF DOLLARS.

This is nearly two and a half times the production of 1860, during which year the eighth United States census was taken; and after every deduction can be made for supposed or real difference of prices, the actual product of our industry was more than twice as great in 1870 as in 1860.

The generous action of Gen. F. A. Walker, Superintendent of the Census, in permitting and aiding the present early publication of these results, deserves our heartiest acknowledgment. It is proper to say, however, that the figures given are the result of Mr. Blodget's computations, not reviewed by the census office, but believed by both the superintendent and Mr. Blodget to be practically identical, the computations of the census office not being sufficiently advanced to make exact comparisons, but precisely the same returns in duplicate being used for each.

These results are so striking and important, that it appears proper to illustrate them by some comparisons. The aggregate sum they represent is so large as justly to attract universal attention: It is fifty millions of dollars more than the entire import trade of New York City, and one hundred millions of dollars more than the entire export trade of New York. It represents a sum of not less than two hundred millions of dollars annually exchanged with other cities and States, bringing us proceeds and profits in any form that may be desired. As most of these manufactures go to the interior of the country, they do not show largely in our foreign trade, but increasing rapidly as they are, we shall find that the facilities afforded by steamer lines will largely increase the demand for our products abroad. It is a notable fact, that the production we report is now ten times as great as the totals of our direct import and export trade put together.

As an associated result, we may refer to the City's rapid growth in other departments. By the facilities we enjoy in the production of coal and iron, and their cheap transportation to any part of the vicinity, we command an enormous business based on these products. One-half of the entire production of anthracite coal really belongs to us, and more than half of all existing facilities for handling it. The establishment of new manufactures is greatly facilitated in consequence, and the extension of the City in streets, buildings and factories, is in rapid and constant progress. Already the paved street lines exceed FIVE HUNDRED (500) MILES in collective length, and there is an annual growth of SIX THOUSAND (6,000) HOUSES, to add to the ONE HUNDRED AND TWENTY-FIVE THOUSAND (125,000) EXISTING IN 1870.

For transportation to and from the interior, the Pennsylvania, Reading, and other railroads, with their connections, form the most direct and powerful machinery existing in any country; a business never interrupted or interfered with, as foreign

or coastwise trade may be, and therefore always at the command of manufacturers or distributing merchants. The values of goods passing over these roads can only be estimated, but those that go to distant markets for consumption cannot be less than SEVERAL HUNDREDS OF MILLIONS OF DOLLARS ANNUALLY IN EACH DIRECTION.

In conclusion, we may say that new classes of goods are being constantly produced here, many of which are strikingly shown by comparing the present census with that of 1860. And what is even more important, there is a large and general advance upon the production of the census year to be observed in the business of 1871, an advance estimated after the most careful observation, at not less than twenty per cent. of the large sum here given as the aggregate values of the present census.

In submitting this as our final report, we desire to express our acknowledgments for the interest taken in our work, and for the assistance rendered by the representatives of the Board of Trade, the Commercial Exchange, and the Franklin Institute, and also to return the thanks of this Committee to Mr. Lorin Blodget of this City, for his generous and effective aid rendered to us in obtaining and compiling the statements herewith presented.

GEO. W. HALL, *Chairman*,
JOHN BARDSLEY,
JOHN C. MARTIN,
WILLIAM THORNTON,
MATTHEW VANDUSEN,
WM. BUMM,
THOS. J. SMITH,
THOS. H. SPENCE,
GEO. A. SMITH,
HENRY MARCUS.

PHILADELPHIA, *February* 28, 1872.

EXPLANATIONS.

The following tabular statements of returns under the Manufacturing Schedules of the Census, are prepared as nearly in conformity with the official forms as possible; and are made as full in regard to machinery and detail of production as can be done in this form of publication. For particular classes, as for cotton and woollen fabrics, iron and steel manufactures, and a few others, a still more extended table is requisite, and on the pages containing the statistics of cotton manufactures this enlarged form of the table has been attempted to some extent.

The list of manufactures, also, or the number of different classes distinguished in the returns, is made as full as has been done in any previous case of census publications; and it is much more extended than that prepared for the official census of 1860. And in order to facilitate reference to all these results, several of the leading classes are entered more than once; first under the most definite name that would apply to them, and next under one or more terms or headings nearest to that first entered. In this way a great aid is given to those who cannot devote time to critical analysis or reclassification of the results. In all such cases, however, the second or subordinate entry is printed in broad-faced type, and this ready distinction always shows that the figures are also entered in some other name, or are included in some larger aggregate described in more general terms. These second or duplicate entries are in no case counted in making up the general summaries.

In obtaining the specific returns of some products, as of yarns made, or cast-steel made, or other similar articles sold from an establishment without entering into any other manufacture conducted in the same establishment, a separation is made, in accordance with the rules of the census office, in order to distinguish the value of all salable or sold productions. But where the whole process of making a completed manufacture is conducted in one establishment, no account is taken of these values or quantities, and no separation is made. The distinction is, that all sold from the place of original manufacture, is separated and classified according to its grade.

In a few instances, it should be observed, the column headed "*using steam*," contains the number of steam engines instead; these cases being large establishments using great power.

It should also be stated, that the census law limits the returns to establishments producing more than $500 in value during the year, which is that ending June 1st, 1870. There should be a large aggregate sum added for manufactures made at place of sale, private residences, and small establishments making less than $500 in value.

In publishing all statistics of this class, there is the contingency of defective original returns, and of errors in summation and classification, which those acquainted with them will readily understand; but that the following alphabetical tables are substantially correct as representing the productive industry of the City of Philadelphia for that year, there can be no reasonable doubt; at least no effort or labor has been spared to make them so.

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Agricultural Implements,	4	$62,000	4	67	37	77		3	$39,500	$80,500	$184,700
Albums,	5	263,000	3	34	34	90	50	5	64,500	161,000	296,000
Alcohol, re-distilled,	3	270,000	3	80	13	20			13,236	515,000	640,250
Ammunition,	2	225,000	1	40	278	80	25	8	69,508	48,735	123,304
Apple Butter and Sauces,	2	10,200				5			3,200	11,700	33,500
Artificial Flowers,	7	77,000			11	18	199	35	45,200	29,100	123,400
Artificial Limbs,	6	27,500			16	17		2	13,900	9,622	40,900
Artificial Teeth,	10	463,300	2	14	35	195	59	11	172,200	118,590	425,500
Artists' Materials,	3	9,500	1	10	3	5	2	4	4,712	6,400	18,600
Augers,	2	7,500	1	5	17	24		1	16,000	13,350	34,500
Awnings,	11	23,000				31	4	2	12,150	17,705	47,343
Axles, iron and steel,	2	38,000	2	18	15	16			11,072	19,000	45,000
Bags, Sacks, and Press Cloths,	3	81,000			9	9	12	2	8,850	106,375	137,800
Bags of Paper,	5	52,700				21	37	1	16,642	53,608	79,700
Bags, Travelling,	3	4,000			2	16	5	2	12,500	27,446	51,200
Bakers, Bread, Biscuit, &c.,	526	1,224,465	10	165	81	1,042	53	143	521,878	2,088,058	3,712,404
Baking Powder,	2	5,050				2	2		1,400	4,850	10,350
Barrel Factories,	6	207,000	2	30	12	280			166,750	298,632	587,247
Baskets,	12	10,200				19	2	1	7,170	4,896	16,628
Bedding,	25	222,200			28	85	34	8	49,642	176,568	374,100
Bedsteads,	4	128,000	4	81	68	146		3	72,150	104,900	271,764
Bed Springs, and Furniture Springs,	3	102,000	1	4	10			3	7,750	51,870	105,600
Beer and Ale. *See also Brewers*,	56	3,291,950	19	415	120	558	2	7	324,372	1,858,819	3,335,946
Beer, Spruce,	3	1,600			3	3			1,208	466	2,045
Bell Founders,	3	30,500	1	4	9	10			5,000	21,475	62,000
Bellows Makers,	1	5,000				2			1,560	10,300	12,000
Belting, Leather,	10	215,800			72	47			31,800	211,135	305,487
Billiard Tables,	3	13,500				9			6,400	4,850	16,600
Bird Cages,	3	2,800			2	5		3	3,750	4,050	12,200
Biscuit and Cracker Bakers,	10	319,000	10	165	79	228	4	78	131,623	626,562	1,083,500

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Bitters,	5	$64,000				16	4	3	$10,436	$7,000	$197,800
Blacking,	8	140,500	4	58	51	41	113	10	60,500	279,137	455,572
Blacklead Crucibles,	4	129,000	3	24	12	39			19,900	143,600	312,000
Blacklead Stove Polish,	2	33,000	1	5	4	8	6	4	8,700	34,800	54,100
Blacksmiths,	138	206,710	2	16	95	318		8	175,713	103,527	459,495
Blank Books,	17	354,000	4	40	143	189	202	48	139,560	283,471	685,120
Blankets, Chiefly White,	5	2,507,500	5	560	650	478	271	118	363,500	1,356,000	2,290,000
Blankets, Horse Covers,	2	13,000			5	4	8		5,300	4,000	18,100
Bleacheries,	6	9,500	2	12	2	12	16	1	7,950	19,450	37,200
Blinds, Window,	13	26,250			1	20	8	4	12,870	17,075	43,738
Block Letters. *With Wood Carvers*,	2	3,000									5,000
Blocks and Pumps (Ship),	2	28,500	1	8	8	18		10	16,100	9,375	32,943
Boat Builders,	7	34,900				21		3	13,180	8,570	31,093
Bolts, Nuts, and Rivets,	13	844,500	12	320	535	566	15	103	267,179	612,158	1,232,842
Bone Black,	1	150,000	2	110	9	40			24,960	160,000	200,000
Bone Buttons,	3	15,300	3	25	72	24	11	14	16,920	25,300	26,600
Bone Dust,	5	28,000	5	50	12	19			11,000	23,490	51,210
Bonnet Frames,	6	95,500			20	22	210	3	62,824	52,080	171,600
Bonnet Wire,	1	1,500				1	1		300	800	1,800
Book Binders,	36	424,075	11	65	257	348	408	62	282,901	291,709	800,414
Book Binders' Tools,	2	18,000	2	16	36	32			18,100	8,650	38,200
Book Publishers,	46	3,271,202	10	71	181	755	302	47	622,914	1,527,850	4,193,485
Book and Job Printers. *See Printers also*,	99	1,518,730	39	292	578	990	135	149	688,309	740,821	2,176,342
Boots and Shoes,	845	3,879,381	13	74	1,633	5,745	2,273	299	3,463,244	4,467,914	10,669,353
Bottlers of Liquors,	10	23,975			6	24		2	12,122	22,536	65,793
Bottle moulds, Iron,	2	4,000			5	6			2,500	2,557	8,000
Box Makers, Wood Packing,	26	110,800	4	83	20	127		2	78,926	133,007	334,356
Box Makers, Segar Boxes,	11	27,000	2	30	10	23	7	12	16,756	34,692	75,740
Boxes, Paper,	25	176,500	4	28	145	135	581	81	202,672	202,582	587,951
Boxwood Blocks,	2	33,000	2	28	10	12			8,500	5,000	16,000
Braid Manufacturers,	4	580,000	4	131	985	116	464	322	149,240	417,820	735,320

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Brass Founders,	45	$688,150	26	275	293	424		14	$190,102	$455,245	$1,020,821
Brass Wares. *With Brass Founders, Tinware, &c.,*	10	35,000	2	8	12	15			11,000	85,000	155,000
Brewers, Beer and Ale,	56	3,291,950	19	415	120	558	2	7	324,372	1,858,819	3,335,946
Bricks, Common and Pressed,	78	1,780,500	15	392	996	2,297		417	1,139,963	354,190	2,348,954
Bricks, Fire,	8	530,000	6	117	20	188		21	108,686	228,250	501,850
Brick Makers' Machines,	4	66,000	3	49	22	51		1	29,800	28,450	83,575
Bristle Dressers,	2	2,700				4		1	1,580	5,000	9,380
Brooms,	18	155,500			87	134		10	52,930	404,742	574,570
Brushes,	38	325,114				266	68	107	130,518	205,798	452,093
Brush Blocks,	2	9,000	2	8	20	8		13	5,620	2,700	12,500
Buttons, Bone. *See Bone,*	3	15,300	3	25	72	24	11	14	16,920	25,300	26,600
Buttons, Pearl,	13	89,000	12	42	213	89	44	62	72,454	79,985	213,000
Buttons, Silk and other (one Porcelain),	2	60,000	1	7	65	9	45	8	25,800	26,500	75,000
Britannia Ware,	2	17,000	2	23	23	19		2	6,525	14,859	36,212
Cabinet Makers' Ware, Furniture,	163	2,469,980	22	515	124	1,960	34	42	1,265,308	1,489,306	4,196,646
Candles and Soap,	53	1,326,400	30	350		397	83	47	273,771	1,299,059	2,390,331
Canes and Whips,	12	58,006			23	22	15	3	11,394	13,827	44,685
Canned Fruits and Vegetables,	9	279,000	7	58	68	116	389		101,950	247,825	578,800
Caps, Men's and Boys',	15	92,650			46	40	124		66,223	140,119	224,056
Cards, Playing, Printers, and Others,	5	293,000	4	55	70	47	99	9	49,150	361,950	497,000
Card Board and Paste Board,	2	79,000	2	31	12	12	7		5,900	100,500	155,000
Carpenters and Builders,	404	5,630,350	10	91	69	4,419		35	3,155,960	8,616,652	17,881,413
Carpets, Ingrain and Venetian,	177	3,161,300	18	463	3,114	3,288	829	308	1,897,643	5,423,801	9,736,347
Carpets, Dutch Wool,	3	8,200			30	30	16	3	13,320	30,180	52,460
Carpets, Jute or Hemp,	2	80,000	2	24	44	25	61	20	40,130	136,225	220,179
Carpets, other (Rag),	59	87,000			140	106	3	10	37,564	85,491	172,268
Carriages,	54	874,900	6	72	136	696	1	11	453,922	340,728	1,199,411
Carriages, Children's,	5	65,600	3	18	22	37		6	30,702	31,690	90,607
Cars for Railroads,	10	1,495,000	5	441	287	1,169	14	1	653,352	1,180,080	2,111,027

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse. Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Car Springs. *See Steel also*,	8	$1,161,000	4	95	86	128		1	$73,202	$253,809	$587,763
Car Wheels, Iron,	1	600,000	1	50	35	157			104,091	590,500	839,000
Carvers,	13	16,075			5	42	1		17,700	9,350	39,450
Cement and Composition Roofs,	17	86,700	2	16	8	167			85,136	133,240	324,086
Chocolate,	2	84,000	2	16	14	24	6		11,500	114,000	146,000
Chemicals,	2	3,586,700	17	1117	254	725	87	37	567,525	3,131,185	4,652,380
Chains, Anchor and Cable,	2	15,500	1	10		21		15	12,800	102,100	135,872
Chairs,	33	240,350	6	48	43	219	8	12	118,221	93,481	345,947
Cheese,	2	50,500	1	10	10	16			7,264	25,690	50,880
China and Glass Decorators,	3	19,500			2	5	5		6,000	14,606	34,600
Chromos (Engravings),	1	10,000				3	2		3,000	16,000	20,000
Clothing (Men and Boys'),	420	6,570,794			2,773	5,241	5,954	59	3,011,760	7,096,780	13,675,451
Cloaks, &c., Ladies',	72	494,083			166	60	658	15	227,394	387,287	1,010,992
Coffee, Essence of,	4	88,300	2	14	12	19	37	1	38,350	147,707	253,250
Coffee, Roasted,	8	31,300	8	36	43	23		1	15,586	472,691	611,635
Coffee Mills, of Iron,	2	5,400	1	3	5	7			4,680	11,328	20,900
Collars, Paper,	2	165,000	2	40	96	25	140		5,600	95,750	300,000
Collars, Shirts, &c.,	74	808,100	3	14	706	138	1,724	70	483,762	1,134,750	2,323,874
Combs, Shell and other,	5	20,100	3	11	136	31	2		13,654	5,249	22,000
Coal Hods,	3	36,000	1	10	10	21		2	10,500	43,300	76,300
Confectioners,	130	692,050	4	37	186	340	164	50	273,197	742,221	1,433,972
Confectioners' Tools,	4	27,500	4	15	15	23		2	12,784	15,192	38,181
Coopers,	51	163,965			5	278		14	204,732	144,937	460,706
Coopers, Cedar,	9	6,000				12			5,075	5,893	19,712
Copper Smiths,	11	143,300	1	20	14	64		1	29,136	96,160	206,050
Copying Presses,	2	12,200	1	20	15	12			8,820	11,190	29,085
Cordage,	9	528,700	3	155	211	112	73	42	114,720	438,822	969,570
Cordials,	1	10,000				2			780	23,022	33,710
Cork Cutters,	8	101,600	4	47	67	58	23	35	38,336	117,541	216,735
Corsets and Hoop Skirts,	18	53,450			30	11	71	4	22,320	34,650	82,660
Cosmetics,	4	25,500			7	7	20	2	7,450	8,550	51,200

KINDS OF MANUFACTURE.	No. of Estab's.	CAPITAL.	Using Steam.	Horse Power.	GENERAL MACHINERY. Cotton Cards.	Wool Cards.	Mules.	Spindles.	Other.	Looms.	Knitting.	HANDS EMPLOYED. Total.†	Men.	Females.	Youths.	WAGES.	MATERIALS.	QUANTITIES.	PRODUCTION.
Cotton Laps and Wadding,	9	$79,000	9	95	22				13			35	46	4	13	$34,120	$80,564		$134,462
Cotton Yarns,	7	524,300	10	249	73		53	20,040	65			191	200	154	94	131,150	470,784	1,800,140 lbs.	766,130
Cotton Mixed, Carpet Yarns,	7	117,000	7	190		39		4,792	9			48	80	25	22	52,650	140,023	729,944 lbs.	224,552
Cotton Print Cloths,	1	100,000	3	160	32		16	9,168		253		301	34	92	28	40,000	84,720	1,800,000 yds.	140,000
Cotton Prints,	9	2,055,000	33	2,472					243			316‡	595	67	203	323,064	6,695,758	67,632,000 yds.	7,773,417
Cotton Piece Goods, Checks, Ginghams, &c.,	54	5,313,950	83	2,587	316		188	114,372		5,793		6,297	1,613	2,912	773	1,592,253	4,127,720	38,097,439 yds.	7,504,981
Cotton Mixed Piece Goods, Linseys*, &c.,	38	1,925,000	56	1,141	198		35	28,760		2,228		2,461	724	1,179	260	660,400	2,198,213	16,232,022 yds.	3,846,249
Cotton Mixed Balmorals,	9	224,750	15	137		18		2,200		347		365	139	275	52	131,100	538,475	1,450,700 No.	1,341,750
Cotton Mixed Coverlets,	14	193,120	4	45					41	200		241	198	69	18	128,325	268,326	450,000 No.	519,060
Cotton Webbing, Tapes, &c.,	5	462,000	7	106						383		383	99	375	252	112,916	247,020		483,441
Cotton Hosiery,	27	339,100	16	147					28		226	254	237	438	281	242,878	545,541		1,499,635
Cotton and Woollen Hosiery,	14	589,400	9	168		48		2,496			216	264	173	304	116	187,950	480,401		865,666
Cured Meats. *See Meat Curers*,	20	1,800,000	8	170								50	235			175,000	3,750,000		5,800,000
Curled Hair,	4	300,000	3	80								20	35	10	15	26,000	355,000		753,000
Cutlery,	15	90,350	12	82								148	113	4	3	49,358	34,406		229,880
Cutting and Stamping Machines,	1	6,000	1	6								4	5			4,000	3,500		10,000

* For cotton warp worsteds, dress goods, terrys, shawls, &c., see *Woollens*

† This return is still very much short of the actual number of machines driven by steam.

‡ Printing machines, 73.

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Dental and Surgical Instruments,	14	$434,400	8	54	64	158	22	17	$120,475	$68,599	$267,779
Dentists, manufacturing,	27	28,200				36		2	26,266	23,967	86,704
Desks and Office Furniture,	6	14,500				23			14,500	7,225	36,000
Dessicating Works,	2	26,500	2	14	7	7	3		3,200	9,300	25,075
Distillers of Spirits. Not including Fine Alcohol,	28	1,281,000	28	456	139	163		1	84,398	742,750	2,000,005
Drugs and Medicines,	54	730,700	6	51	93	215	65	32	152,033	622,500	1,290,600
Drug and Spice Mills,	9	414,500	9	247	98	100	47	5	82,520	351,038	712,550
Dolls and Toys,	8	21,100	4	13	35	41	19	22	22,280	20,151	78,930
Doll Heads,	3	7,500			2	12	10	5	10,580	5,256	37,430
Dyers, Wool and Cotton,	49	748,700	42	814	404	508	16	24	285,939	2,197,598	4,977,407
Earthenware, Pottery,	14	182,500	7	73	65	192	17	3	94,950	144,837	340,100
Electro Platers, Silver,	3	4,050			10	13	1	1	9,200	7,742	20,000
Electrotypers. *See Stereotypers*,	5	35,000			15	25			20,000	23,000	68,000
Embroideries,	5	5,000			3		16	1	3,200	3,000	10,000
Engravers, Bank Note,	2	1,100,000	1	10	34	43	82		123,765	30,181	240,708
Engravers, Card and Seal,	20	42,925			32	57	6	21	42,728	16,923	103,000
Engravers, Steel,	13	43,000	1	3	15	41	6	1	27,940	9,815	68,850
Engravers, Wood,	15	14,750			2	55		2	35,235	7,798	84,040
Envelopes,	7	178,200	5	49	70	57	105	6	41,158	145,150	269,100
Extracts, Flavoring,	2	4,000				2	2		2,200	4,600	7,200
Extracts, Fluid,	6	35,500	1	2	4	17		2	9,360	22,676	59,820
Felt, Roofing,	2	20,000	2	49	2	13	2		8,200	41,100	94,000
Fertilizers, Phosphate, Poudrette, &c.,	8	1,105,000	6	325	54	246			137,744	509,660	1,035,952
Files, Steel,	12	70,500	2	30	22	90		32	33,863	30,864	88,890
Finishers of Cloth,	4	21,000	1	6	35	6	3	4	5,728	9,390	24,448
Fish Smokers,	2	1,000				5			1,000	1,000	2,400
Fire Hose, Leather,	5	81,500			44	20			12,680	95,900	124,500
Florists,	5	98,500				27		1	7,450	2,931	71,000

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Flour Mills,	20	$618,500	20	1,144	116	154		1	$100,160	$3,519,865	$4,920,516
Foundries. *See Iron and Brass*,											
Fruit Preservers,	1	1,000				1	1		800	1,000	3,000
Furniture, Cabinet and Household,	163	2,469,980	22	515	124	1,960	34	42	1,265,308	1,489,306	4,196,646
Furriers,	41	581,450			12	107	265	10	105,251	430,068	841,898
Gas Fixtures and Chandeliers,	8	1,074,894	8	173	411	795	42	36	421,484	407,447	1,095,780
Gas Tubes or Pipes, with Wrought Iron Tubes, &c.,	4	687,500	8	245	115	185		5	112,000	390,525	765,760
Gas Meters,	3	145,000	3	35	38	155	3		110,340	146,900	319,690
Gas Works,	5	3,900,000	5	80	468	982			737,691	1,613,528	3,120,700
Gaslight Shades,	2	68,000	1	5	32	22	20		27,000	25,300	113,000
Gilt Frames, Mirrors, &c.,	31	467,250	3	38	32	270		23	143,148	303,371	714,603
Gilders,	13	82,950			4	58		7	34,350	43,422	186,900
Glass Works,	9	1,226,016	9	150	162	812	28	560	552,610	540,592	1,554,343
Glass Cutters,	2	1,100	2	3	55	7		1	3,500	40	7,100
Glass Stainers,	3	27,000	1	6		38	2		29,228	33,300	99,380
Glass and China Decorators,	3	19,500	1	2	6	5	5		6,000	14,606	34,600
Gloves, Kid and Buckskin,	3	5,800			5	13	12	2	9,764	3,660	30,990
Glue, Sand Paper, Curled Hair, Whips, &c. Establishments where all these products are made together,	5	3,830,000	12	1,245	216	531	25	176	248,200	1,480,000	2,830,000
Glue, only,	5										755,000
Gold Watch Cases. *See Watches also*,	8	237,000	4	9	147	139	6	1	106,200	342,050	528,000
Gold Chains,	3	53,000	1	15	42	44		4	27,800	76,570	125,000
Gold Leaf and Foil,	7	149,100	1	15	21	88	84	15	71,314	164,130	287,324
Gold Pens,	2	7,000			4	2			1,550	2,800	8,000
Gold and Silver Coinage and Assay,	3	504,500	1	143	57	185	58	1	345,370	4,233,157	4,067,168
Granite and Flagstones,	11	138,000				128		5	93,500	106,150	255,650
Grindstones,	2	30,000	2	30	10	8			5,000	18,000	30,000
Guns & Pistols,	15	177,800	3	49	133	89	2	2	55,698	27,801	121,105

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Hardware, *See Small Metal Wares, Locks, Steel Tools, &c.*,											
Haircloth,	2	$80,000	2	31	106	13	73	1	$21,500	$35,900	$71,300
Hair Jewelry,	3	12,500			3		7		1,800	3,400	7,625
Hair Work,	26	84,425			16	15	146	13	30,797	66,335	161,280
Hair, Curled,	4	300,000	3	80		35	10	15	26,000	355,000	753,000
Hame Makers,	3	34,000	2	50	21	25			9,100	10,779	28,350
Harness Makers. *See Saddle and Harness also*,	65	544,050			23	379	15	8	202,897	457,732	914,568
Harness Mountings,	3	9,500			2	14		4	8,050	6,195	30,000
Hats, Wool, Silk and Fur,	40	543,850	7	86	76	555	316	29	435,857	523,273	1,466,452
Hat Blocks,	1	1,400	1	3	3	2			1,200	353	3,000
Hatters' Trimmings,	4	11,000			7	7	3		2,081	10,626	26,625
Heaters and Ranges,	34	759,080	5	48	45	402		5	308,554	499,257	1,429,006
Hinges, Iron, with Locks, &c.,	5										120,000
Hollow Ware and Stoves. *See Iron*,	25	2,575,800	11	254	114	1,077		80	647,731	665,779	2,102,701
Horse Collars. (In part with Harness),	4	29,500	1	12	8	25			18,104	33,225	66,250
Hosiery, Cotton. *See Cottons*,	27	339,100	16	147	675	237	438	281	242,878	545,541	1,499,635
Hosiery, Woollen,	34	3,255,600	19	514	2,488	784	2,186	527	915,991	2,091,282	3,573,649
Hosiery, Cotton and Woollen,	14	589,400	9	168	4,957	173	304	116	187,950	480,401	865,666
House Furnishing Goods,	6	70,200	1	20	29	67		5	32,820	58,934	160,100
Hubs, Spokes, Felloes, &c.,	4	152,000	4	100	51	55		2	28,669	89,750	175,600
Ink, Printers,	4	118,000	4	65	24	46			35,860	142,112	219,120
Ink, Writing,	5	28,300			11	11	7	12	5,900	10,823	32,800
Iron Manufactures—											
Axles,	2	38,000	2	18	15	16			11,072	19,000	45,000
Bar and Rod, Rolled,	6	1,083,100	24	1,590	155	793			524,348	1,467,470	*2,326,492
Boilers, in separate Establishments only,	15	581,812	7	118	203	244			152,417	601,155	1,264,997
Bolts, Rivets and Nuts,	13	844,500	12	320	535	566	15	103	267,179	612,158	1,232,842
Bottle Moulds,	2	4,000			6	7			3,000	2,507	8,000
Building Fronts,	3	150,000	3	80	35	155			112,000	116,200	285,000

* Tons of Bar Iron, 32,956.

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Iron Manufactures—*Continued.*											
Blacksmiths,	139	$210,510	4	12	198	325		8	$329,713	$105,264	$467,469
Car Wheels,	1	690,000	1	50	35	157			104,091	590,500	839,000
Castings, General,	43	1,019,584	33	404	109	985		18	538,019	691,107	1,834,525
Castings, Malleable,	2	220,000	2	110	77	213	3	60	142,200	122,500	350,000
Chains and Cables,	3	16,300	1	10	10	21		15	12,800	104,100	134,172
Coffee Mills and Roasters,	2	5,400	1	3	5	7			4,680	11,328	20,900
Coal Hods,	3	36,000	2	10	11	21		2	10,150	43,300	76,300
Copying Presses,	2	12,200	2	20	15	12			8,820	11,190	29,085
Doors, Shutters and Hinges,	3	40,500	1	10	8	37		1	23,050	19,189	84,000
Foundries, with Castings,	59	3,200,000	22	450	*88	450			330,000	†3,039,913	3,700,000
Galvanized and Corrugated,	5	279,000	5	88	55	131		5	82,950	448,796	794,526
Heaters and Ranges,	34	759,080	4	48	45	402		5	308,554	499,257	1,429,006
Locomotives,	2	2,525,000	8	440	360	1,673		20	1,295,023	1,644,052	‡3,248,279
Machinery, General,	94	12,905,656	89	3,076	2,974	5,895	3	59	3,683,867	4,735,515	11,393,745
Miscellaneous, Wrought,	15	133,000	10	41	60	121		3	63,000	125,000	218,000
Nails, Wrought,	6	4,750			14	14			4,458	4,490	14,738
Pipe, Wrought,	4	2,750,000	14	985	462	765		20	448,200	1,604,525	3,055,760
Plate, Rolled,	1	150,000	5	200	22	100			7,000	244,000	350,000
Railings and Ornamental,	9	189,500	6	47	34	153			100,334	77,924	301,809
Rolling Mills (Iron only),	9	2,033,100	44	3,190	§324	1,310		20	604,348	2,543,770	3,976,492
Safes,	5	150,400	3	43	22	101			71,960	71,548	247,743
Seal Presses,	2	5,500	1	8	10	6		1	5,250	2,430	13,000
Sheet, Rolled,	3	650,000	13	1,150	‖70	387			275,000	675,000	1,100,000
Shovels and Spades,	5	130,000	5	111	43	89		10	53,100	157,200	213,600
Spikes, Wrought,	4	55,600	2	60	12	63			42,330	90,732	263,390
Stoves and Hollow Ware,	25	2,575,800	11	254	114	1,077		80	647,731	665,779	2,102,701
Wire Mills,	2	62,000	2	40	30	29			8,200	45,231	62,100
Wire Manufactures,	10	89,400	2	12	34	80	1	14	45,250	90,504	190,158
Ivory and Bone Turners,	7	144,625	6	94	231	114	16	17	79,032	51,716	133,183

* Cupola Furnaces. † Tons of Pig Iron, 70,622. ‡ 269 Locomotives. § 35 Trains Rolls, 101 Furnaces. ‖ 13 Trains Rolls, 25 Furnaces.

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Japanned Ware. *With Tin Ware,*	3	$30,000			10	12		3	$4,400	$16,500	$35,000
Jewellers and Watchmakers,	62	815,500	6	31	160	438	55	50	337,122	647,907	1,423,691
Kindling Wood,	5	33,900	5	34	26	20			11,539	23,230	41,950
Knitting Frames,	3	17,000	3	21	25	24			9,248	10,647	31,740
Knit Goods, Cotton & Woollen. *With Hosiery,*	88	4,183,700	50	661	4,800	1,202	1,067	947	1,353,919	3,137,224	5,962,850
Laces and Ruches,	3	49,000			14		15		3,300	6,000	12,500
Lampblack,	4	183,000			6	27		9	30,900	65,350	117,700
Lamps,	8	113,700	4	43	45	80	22	18	54,106	100,322	201,000
Lapidaries,	2	5,500			19	4		1	2,100	2,800	6,000
Lamp and Gas Light Shades,	2	68,000	1	5	32	22	20		27,000	25,300	113,000
Lasts,	6	36,300	5	23	9	44		2	21,322	18,863	51,634
Lead Pipe,	2	600,000	2	12	10	34			20,000	470,000	620,000
Lead Shot,	1	50,000	1	15	4	5			4,500	80,000	100,000
Leather in all forms,	87	2,502,978	34	325	650	1,343	148	79	875,936	4,060,615	6,254,046
Dry Salters,	4	90,000				22			12,050	245,544	416,500
Skin Dressers,	4	221,000	2	17	102	60			34,000	464,864	541,800
Tanners, Sole and Upper,	9	496,000	8	146	420	78			44,400	369,600	523,430
Curriers,	21	202,100	4	17	10	84		1	53,654	540,814	721,880
Calf Kid,	9	218,000	3	25	16	155	9	4	106,610	360,440	574,043
Glove Kid and Deer Skin,	3	24,000				15			8,652	19,167	35,682
Morocco, Pure Goat,	23	789,950	11	57	77	637	77	22	395,572	1,533,033	2,307,113
Fancy Linings and other,	14	461,928	6	63	55	292	62	52	220,998	524,130	1,133,568
Lightning Rods,	3	152,100	2	15	24	66		11	23,000	156,429	335,700
Lime Burners,	3	14,000			4	11			5,008	17,798	25,875
Lithographers,	30	509,200	3	31	294	243	22	14	201,495	138,058	628,135
Lock Manufacturers,	6	61,000	3	19	52	73		40	57,300	62,704	183,114
Locksmiths and Bell Hangers,	31	51,250			37	37	1	9	24,461	18,490	78,095
Locomotives,	2	2,525,000	8	440	360	1,673		20	1,295,023	1,644,052	*3,248,279
Looms, Power. *With Machinery,*	8	276,000	6	147	52	156		4	83,096	74,324	191,415

* Number of Locomotives made, 269.

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Looms, Jacquard,	1	$3,000	1	4	4	6		4	$4,320	$5,000	$18,000
Lye,	3	80,000	2	11	9	26			14,500	122,150	213,000
Machine Cards,	1	100,000	1	6	100	18	10		17,000	81,700	115,500
Machinery, Cotton and Woollen. *With General Machinery*,	6	1,384,000	15	541	227	658	12		311,500	378,542	1,084,605
Machinery, General. *With Iron*,	94	12,905,656	89	3,076	2,974	5,895	3	59	3,683,867	4,735,515	11,549,318
Machines, Knitting. *With General Machinery*,	3	17,000	3	21	25	24			9,248	10,657	31,740
Mahogany Mills. *With Saw Mills*,	2	150,000	2	60	15	15			13,000	105,000	159,000
Malt,	10	829,500	8	155	77	150			82,350	870,166	1,127,124
Map Engravers,	1	4,000				9			5,000	700	8,000
Map Mounters and Colorers,	6	10,000			2	5	14	3	6,750	10,081	26,947
Map Publishers,	5	165,000			1	12	7		8,812	40,736	239,500
Marble Cutters and Manufacturers,	85	2,116,400	22	468	616	1,220		21	769,181	1,051,500	2,662,648
Mast and Spar Makers,	2	30,000				14		7	15,000	31,600	63,000
Matches,	3	71,500	3	19	32	19	43	43	18,700	32,780	253,000
Match Sticks,	1	500	1	4	2	3		4	1,000	850	2,162
Mathematical and Optical Instruments,	22	110,658	3	6	68	73	22	8	44,064	58,949	194,169
Mattresses and Bedding. *With Bedding, Mats*,	3	4,500			6	4	1	2	1,850	3,650	10,550
Medicines, Patent or Proprietary,	24	1,373,104	5	43	24	120	99	10	119,199	2,650,230	5,490,105
Medicine Chests,	2	8,000			3	5		2	3,760	2,400	9,800
Meat Curers and Smokers,	22	2,627,500	10	200	55	285		3	191,960	4,392,000	6,252,752
Melodeons. *With Pianos.*											
Meat Cutters and Sausage Makers,	7	27,900	4	39	12	16			9,547	84,073	110,552
Metals, Babbitt's, &c.,	2	75,000	1	5	9	12			8,760	109,770	176,842
Metal Spinner,	1	2,500	1	3	3	4			2,500	2,400	6,500
Military Goods and Regalia,	8	241,200	4	22	70	37	130	5	53,400	99,410	259,800
Milliners,	69	119,450			16	6	206	10	55,993	96,642	242,904
Millinery and Straw Goods,	10	196,000			38	43	489	7	96,645	138,705	372,150
Mill Stones,	4	43,000	2	12	5	21			15,046	12,520	44,000

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Millwrights,	4	$59,000	2	28	29	42			$24,200	$29,130	$79,400
Mineral Water,	17	72,175			21	83		19	39,130	67,207	217,726
Mince Meat,	3	50,000	2	12	3	31	21		19,250	116,840	161,000
Morocco Cases,	8	25,000	1	2	6	51	12	6	28,150	21,815	83,500
Morocco Leather. *Pure Goat Skin*,	23	789,950	11	57	77	637	77	22	395,572	1,536,036	2,307,113
Mosquito Nets,	1	15,000			4	1	15	3	3,000	10,130	17,000
Musical Instruments other than Pianos and Organs,	9	24,600	1	6	12	15	1	2	7,056	6,939	32,225
Music Publishers,	6	270,500			20	29		8	24,350	84,000	229,500
Mustard,	2	2,100	1	2	4	3			1,680	2,575	7,845
Mouldings, Wood. *See Wood Mouldings also*,	12	212,000	12	264	135	326		7	211,015	243,161	655,343
Nails, Wrought,	6	4,750			14	14			4,458	4,490	14,738
Neckties,	5	61,000			20	7	180		46,268	124,100	211,500
Needles,	3	5,000	1	4	17	11			4,577	2,010	10,536
Newspapers,	43	3,472,000	28	399	121	1,199	20	35	1,142,959	1,375,333	4,297,173
Oil Cloths,	3	360,000	3	58	52	153	10	42	84,252	340,320	543,995
Oiled Silk,	1	1,500				1	1		400	300	1,400
Oils, Whale and Fish,	2	65,000	1	12	17	10			6,800	165,000	195,000
Lard,	7	466,000	2	20	60	40		6	32,300	1,073,650	1,327,000
Linseed,	4	520,000	4	250	34	103		1	74,800	424,275	649,390
Petroleum, Refining,	15	682,000	15	565	121	184	6	7	137,600	940,429	1,573,582
Paraffine,	1	20,000	1	5	6	12			6,000	15,500	75,000
Rosin.	2	32,000	1	4	4	10			6,255	5,423	54,438
Paints and Colors (not including White Lead Works),	21	1,254,250	17	583	159	267	10	15	169,772	982,497	1,941,411
Painters, House, Sign and Ornamental,	153	403,775				598	6	13	357,902	369,812	1,145,104
Paper Bags. *See Bags also*,	5	52,700				21	37	1	16,642	53,608	79,700
Paper Mills,	6	2,126,600	6	920	61	464	181	2	295,300	1,314,609	2,609,000

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Paper, Fancy and Binders',	3	$23,500	3	14	39	11	27	15	$16,000	$27,500	$55,500
Paper Boxes. *See also Boxes*,	25	176,500	4	28	145	135	581	81	202,672	202,582	587,951
Paper Hangings,	4	930,000	4	81	86	345	8	32	128,340	548,352	881,000
Paper Hangers,	19	30,773				50			27,312	44,468	102,491
Paper Patterns,	3	4,050			9	2	8	2	3,300	700	10,500
Papier Mache,	1	1,500	1	8	2	3	3		2,800	4,680	10,000
Passe-partouts,	2	4,000				11		1	6,000	2,600	13,000
Paste,	2	1,500	2	3	2	2			600	2,400	4,500
Pasteboard and Cardboard. *See Cardboard also*,	2	79,000	2	31	12	12	7		5,900	100,500	155,000
Pattern Makers,	21	45,600	8	37	59	99		2	69,484	27,958	161,800
Patent Leather. *With Fancy Leathers.*											
Pearl Buttons. *See Buttons also*,	13	89,000	12	42	213	89	44	62	72,454	79,985	213,000
Pens, Steel,	1	30,000			50	7	30		8,000	11,468	30,000
Percussion Caps. *See U. S. Arsenal, Ammunition.*	1										
Perfumery and Perfumed Soaps,	22	580,000	7	73	54	108	172	14	112,900	296,041	879,595
Philosophical Instruments,	3	27,000			7	8		1	4,800	9,660	24,300
Photographers,	47	221,475			142	114	72	10	98,796	64,026	316,891
Photographic Apparatus,	2	3,900	1	1	8	3			2,840	1,210	7,600
Pianos,	9	343,000	2	120	24	296		2	192,340	176,800	492,400
Piano Movements,	2	2,000	1	1	3	2	2	1	1,700	4,800	10,300
Pickles and Sauces. *With Canned Goods*,	2	15,000			10	4	6		3,000	15,000	28,000
Picture Frames. *See Gilt Frames.*											
Plane Makers,	3	3,600	1	8	3	7			4,560	4,950	12,070
Planing and Saw Mills,	30	1,437,167	30	958	248	435	2	14	300,074	1,056,577	1,927,590
Plaster Mills,	4	240,000	4	310	30	103			71,462	180,375	376,500
Plasterers, Cornice Work,	7	5,500				24			15,020	19,100	39,300
Plaster Casts,	5	22,000			200	14		2	9,070	5,410	35,000
Plate Makers, Steel and Copper,	2	42,000	2	40	6	15	8	0	10,000	21,000	55,000
Plate Printers,	7	53,900			63	58	4		28,976	26,682	327,500

LIBRARY OF THE UNIVERSITY OF PENNSYLVANIA PHILADELPHIA

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Playing Cards,	1	$100,000	1	20	22	16	43		$20,600	$72,800	$110,000
Plumbers and Gas Fitters,	150	599,500	1	15	35	595		61	369,850	607,904	1,549,642
Pocket Books and Portemonnaies,	6	4,000			2	16	5	2	12,500	27,446	51,200
Pocket Flasks,	1	1,000	1	1	1	1	1		1,000	3,700	6,000
Porcelain Ware,	1	100,000	1	25	6	125	5	30	48,000	200,000	350,000
Porter. *See Beer and Ale.*											
Portrait Painters,	7	6,100				9	1		6,800	1,573	15,200
Potteries *See Earthenware*,	14	182,500	7	73	65	192	17	3	94,950	144,837	340,100
Preserved Fruits. *With Canned Fruits.*											
Print Works,	9	2,055,000	33	2,472	†597	595	67	203	323,064	6,695,758	7,773,417
Printers, Book and Job,	99	1,518,730	39	292	578	990	135	149	688,309	740,821	2,176,342
Printers, Newspaper,	43	3,472,000	28	399	121	1,199	20	35	1,142,959	1,375,333	4,297,173
Printers' Frames and Wood Materials,	5	5,500	1	2	6	10			5,200	4,275	16,675
Printers' Rollers,	2	9,000			50	6		1	4,270	3,950	11,500
Printing Ink,	4	118,000	5	65	24	46			35,860	142,112	219,120
Provision Curers. *See Meat Curers also*,	22	2,627,500	10	200	55	285		3	191,910	4,392,000	6,252,752
Pumps, Wooden,	3	8,100				8			5,936	5,350	14,921
Putty. *With Paints and Leads*,	10										50,000
Razors. *With Cutlery*,	3										3,200
Razor Straps,	1	5,000				4	4	2	4,000	3,800	10,000
Rectifiers,*	2	88,000			32	5			3,050	153,100	214,000
Reeds and Heddles,	6	43,400	5	23	29	24	16		14,870	30,600	68,800
Refrigerators,	7	58,200	1	11	7	49		2	41,638	39,015	132,400
Regalia. *See Military Goods*,	4	80,000			20	12	34		18,000	22,500	65,000
Ribbons. *With Silk*,	3	240,000	3	10	97	45	93	2	24,000	155,000	280,000
Riggers,	2	2,500				5			3,000	1,400	7,800
Roofs, Felt and Gravel,	17	86,700	2	16	8	167			85,136	133,240	324,086
Roofs, Iron Galvanized,	2	110,000	1	25	10	35			22,000	235,000	420,000
Roofs, Tin. *With Tin Work*,	20	75,000				33			18,000	125,000	210,000
Roofers, Slate,	2	1,100				3			1,500	3,500	6,900

* No general returns. A true account is about 25 establishments, values rectified about $3,500,000.

† Printing machines, 73.

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Rope. *See Cordage also*,	9	$528,700	3	155	211	112	73	42	$114,720	$438,822	$969,570
Rosin Oil. *See Oils also*,	2	32,000	1	5	2	10			6,255	5,423	54,438
Sacking, Hemp,	1	1,500	1	20	28	28	40	40	23,000	51,800	80,000
Saddle and Harness. *See Harness*,	65	544,050			23	379	15	8	202,897	457,732	914,568
Saddle Trees,	1	25,000	1	15	8	40	3		17,500	16,150	38,588
Safes,	5	150,400	3	43	22	101			71,960	71,543	247,743
Sails,	9	50,300			1	69		6	52,953	72,459	152,514
Sand Paper. *With Glue, &c.*,	3										395,000
Sash, Door and Blind,	36	1,003,735	35	1,181	604	837		16	520,732	740,912	1,910,850
Saws, Steel,	8	628,800	15	385	304	478	2	48	369,411	409,243	892,260
Saw Handles. *With Saw Makers and Scroll Sawing*,	3	30,000	5	35	16	16			12,000	15,000	35,000
Saw Mills. *See Planing Mills.*											
Seal Presses,	2	5,500	1	8	10	4		1	5,250	2,430	13,000
Scales and Balances,	8	84,000	2	10	20	66	6	8	37,900	41,048	175,160
Screws, Iron,	2	6,500	2	11	17	6		4	4,349	1,921	24,400
Scroll Sawing. *See Wood Turners, &c.*											
Scourers,	17	17,550	8	26	20	29	3	1	18,316	9,340	46,350
Seeds, Cleaning and Packing,	4	215,000	1	10	15	18	66		13,500	148,000	283,000
Segars,	389	1,005,390				1,059	118	135	612,385	872,953	2,042,123
Segar Boxes,	11	27,000	3	30	10	23	7	12	16,756	34,692	75,740
Sewing Machines,	13	780,500	4	89	90	385	2	7	235,770	221,608	791,150
Shawls, *See Woollens*,	22	791,600	17	245	459	394	500	184	424,876	1,114,590	1,832,550
Shingles,	1	34,000	1	25	5	7		5	5,000	2,750	30,400
Ship Smiths,	9	46,900	2	16	19	36			20,302	18,351	62,260
Ship Builders,	12	3,705,700	12	460	62	1,719	1	12	1,129,590	820,912	3,012,663
Ship Carpenters and Joiners,	6	55,000				60			51,912	64,025	162,935
Shirts,	25	255,000	2	20		77	602	6	204,050	349,400	929,510
Shoe Fitters. *With Boot and Shoe Makers*,	22	105,000				55	60		43,000	50,000	135,000
Shoemakers' Tools. *With Cutlery*,	3	10,000				12			4,500	3,000	15,000

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Shoemakers.* *See Boot and Shoemakers*,	845	$3,879,381	13	74	1,633	5,745	2,273	299	$3,463,244	$4,467,914	$10,669,353
Shot Manufacturers,	1	50,000	1	15	4	5			4,500	80,000	100,000
Shoddy,	2	53,000	2	67	12	14	14		15,684	63,600	157,500
Shovels and Spades,	5	130,000	5	111	43	89		10	53,100	157,200	213,600
Show Cards,	3	7,600				11	1	8	8,048	5,338	25,267
Show Cases,	4	18,000				28			10,160	18,050	35,060
Shuttle Makers,	5	31,200	3	22	48	20			11,220	9,100	51,200
Silk Ribbons,	3	240,000	3	10	97	45	93	2	24,000	155,000	280,000
Silk Thread, &c.,	2	175,000	2	18	234	19	96		90,000	196,650	300,000
Silk Dress Trimmings, Fringes, Upholstery Trimmings, &c.,	13	935,500	4	56	1,147	209	809	34	285,600	548,105	1,094,000
Silk and Wool Dress Goods, Poplins,	1	10,000	1	1	7	7	3		7,000	14,700	49,900
Silk Dyers. *With Dyers*,	6	25,000	4	16	20	6	7		5,500	15,000	45,000
Silk, Oiled,	1	1,500				1			400	300	1,400
Silverware, Solid. *Also with Jewelers, &c.*,	4	45,000				20		4	15,000	60,000	103,000
Silver Plated Ware,	32	348,100	13	62	137	252	68	35	176,908	222,059	671,000
Sizing. *With Glue, &c.*,	2										145,000
Skin Dressers. *See Leather also*,	4	221,000	2	17	102	60			34,000	464,864	541,800
Slate Mantels,	7	27,000			2	97			60,242	15,350	200,581
Snuff,	3	43,000	2	10	11	18	7		10,000	27,500	72,622
Soap Moulds,	1	11,000	1	2	4	2			1,404	1,400	4,000
Soap and Candles,	53	1,326,400			6	397	83	47	273,771	1,299,059	2,540,331
Soda Water Apparatus,	2	50,000	2	16	19	27		3	15,340	32,040	77,000
Soapstone Works, Tables, &c.,	2	53,000	1	10	8	32			18,800	10,600	48,365
Spar Makers. *See Masts*,	2	30,000				14		7	15,000	31,600	63,000
Spice Mills. *See Drug and Spice Mills*,	9										712,550
Spokes, Rims, Hubs and Wheels,	4	152,000	4	100	51	55		2	28,669	89,750	175,600
Spikes, Iron. *See Iron*,	4										263,390
Spirits Recovering. From Rectifiers' waste Charcoal, &c.,	1	5,000		2	2	3			2,500	13,000	20,000

* More than three-fourths of this amount is Shoes, and the larger share Ladies and Children's

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Spool Makers,	2	$6,200	2	12	14	9		2	$3,843	$3,961	$10,469
Stair Builders,	16	63,200	3	6		69			53,612	47,311	137,285
Stair Rods,	1	40,000	1	15	3	9			4,100	8,550	15,000
Starch,	2	30,000	2	20	2	10			5,300	30,825	49,800
Stationery. *With Paper, Ink, Pens, &c.,*	12	43,000	2	6	10	15	12	4	9,500	18,000	46,000
Statuary, Bronzes,	2	41,000	2	25	11	15			9,744	18,600	55,000
Stamps, Rubber,	1	1,500			5	1		1	450	4,200	10,000
Steam Engines. *With Machinery,*	18										1,500,000
Steam Governors,	4	76,000	3	16	53	33		2	23,600	10,405	52,825
Steel Axles,	1	18,000	1	10		12			5,072	11,000	35,000
Steel, Cast,	6	1,500,000	16	1,105	107	530		10	293,282	984,357	1,908,250
Steel Rolling Mills,	4	650,000	11	690	*86	207			145,500	820,770	†1,360,000
Steel Springs,	8	1,161,000	5	95	87	128		1	73,202	253,809	587,663
Steel Saws,	8	623,800	4	385	304	478	2	48	369,411	409,243	892,260
Steel Forks,	1	30,000	1	30	10	40		3	16,000	50,000	120,000
Steel Tools. *See Tools also,*	16	268,100	15	190	249	199	2	90	129,485	109,249	359,350
Stencil Cutters,	14	15,650			3	24		3	12,350	4,589	48,260
Stereotypers. *See Type Founders, Addl.,*	8	84,500	2	12	44	176	12	20	136,700	49,450	287,200
Stone Cutters, Granite, Flag, &c.,	11	138,000				128		5	93,500	106,150	255,650
Stone Masons,	4	2,300				17			12,060	500	15,890
Stoves and Hollow Ware,	24	2,375,800	8	194	85	957		75	591,731	605,579	1,881,931
Stoves and Ranges. *All of this General Class,*	68										3,310,937
Sugar Refiners,	13	4,644,000	31	2,651	‡420	1,032		2	684,218	23,093,575	25,862,876
Sugar Refined,	13									169,691,723 lbs.	23,187,130
Surgical and Dental Instruments,	14	434,400	8	44	64	158	22	17	120,475	68,599	267,779
Suspenders,	2	2,600				2	3		1,600	1,500	3,900
Table Cutlery,	1	25,000	1	20	150	50			15,000	8,160	50,000
Tablets,	1	10,000			2	1		1	624	8,250	12,000
Tags,	2	7,000	1	2	32	9	10	6	5,900	5,500	19,000

*Trains of rolls, 9; furnaces 37. †6,550 tons. ‡Centrifugals, 84; Vacuum pans, 21.

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Tallow Renderers,	7	$121,175	3	27	8	36			$33,128	$430,581	$588,206
Tanners, Sole and Upper. *With Leather*,	9	496,000	8	146	420	78			44,400	369,600	523,460
Tape Makers,	2	45,000	2	21	70	14	53	10	12,216	33,320	60,049
Terra Cotta Ware,	6	408,000	5	88	86	109	1	5	50,792	43,448	248,000
Teeth, Artificial,	10	263,300	2	14	18	125	34	1	87,200	88,590	375,500
Telegraphic Instruments,	5	25,000			13	16	1	2	12,800	14,251	99,017
Tile, Marble. *With Marble*,	2	10,000									4,000
Tile. *With Bricks and Terra Cotta*,	2	15,000									15,000
Tin Cans,	7	187,000	3	40	44	78	53	1	54,550	110,925	258,400
Tin and Sheet Iron Wares,	155	648,943	5	48	291	543	47	75	306,086	511,029	1,145,028
Tin and Metal Roofers,	28	185,800	2	25	54	195		2	108,610	152,840	395,121
Tobacco,	9	137,750	1	6	6	54	2	11	23,373	57,111	207,610
Tools, Steel,	16	268,100	15	190	249	199	2	90	129,485	109,245	359,350
Toy Prize Boxes,	1	1,000				1	7		2,400	10,000	17,000
Toys,	5	13,600	11		23	29	9	17	11,700	14,895	41,500
Travelling Bags, Leather. *See also Bags*,	3	4,000			2	16	5	2	12,500	27,446	51,200
Trunks,	22	115,775			9	139	10	5	90,030	169,636	335,477
Trusses,	5	28,000	1	6	27	24	32	1	35,950	21,145	79,790
Turners, Ivory and Bone,	7	144,625	6	94	231	114	16	17	79,032	51,716	138,183
Turners, Wood,	35	161,502	29	235	455	280	6	29	147,161	88,239	370,330
Type Founders, *See Stereotypers, Additional*,	4	862,500	4	20	104	237	14	89	187,350	117,578	528,000
Umbrellas and Parasols,	24	1,023,882	2	28	271	273	1,013	51	349,160	1,102,450	2,098,126
Umbrella Frames and Fixtures,	4	265,000	4	95	261	209	165	56	161,719	169,600	427,350
Undertakers' Wares,	31	82,850				84	18	2	53,658	49,042	184,503
Upholsterers,	46	254,858			17	148	62	12	106,061	269,091	646,543
Upholsterers' Trimmings,	9	112,000	3	21	146	44	139	52	52,020	99,231	277,171
Varnish,	7	310,000	4	32	11	31			21,770	172,135	437,000
Varnishers,	5	4,050				9		3	3,750	1,785	8,800
Vats, Wooden,	4	30,000	1	19		29			19,584	29,530	88,800

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Venetian Blinds,	13	$26,250	1	1		20	8	4	$12,870	$17,075	$43,738
Vinegar,	8	92,200				20			12,056	76,392	190,293
Wadding and Laps. *See Cotton*,	9	79,000	9	95	55	46	4	73	34,120	80,864	134,462
Wagon Makers,	15	595,500	3	100	150	337			217,153	205,552	566,590
Wall Paper, Hangings,	4	930,000	4	81	86	345	8	32	128,340	548,352	881,000
Washing Machines,	6	123,400	3	51	22	36			18,400	30,020	195,940
Watchmakers and Jewellers,	44	260,300	1	5	161	174	6	10	119,290	310,091	443,860
Watch and Clock Dials,	1	5,000	1	4	4	3			2,500	7,500	11,450
Webbing and Tape. *See Cotton*,	5	462,000	5	106	383	99	375	252	112,916	247,020	483,441
Webbing, Worsted. *See Wool*,											
Willow Wares. *See Baskets, Wooden Ware, &c.*											
Wharf Builders,	3	13,000		170	9	51			10,000	36,050	48,300
Wheelwrights,	56	153,200	5	23	35	165		8	93,502	70,297	242,558
White Lead,	3	525,000	3	120	20	106			64,800	750,100	1,108,000
Whiting and Chalk,	4	125,000	4	55	6	35		2	19,000	154,800	226,400
Whips and Canes. *See Canes*,	12	58,006			23	22	15	3	11,394	13,827	44,685
Whips, Hide. *With Glue*,	3										65,000
Wigs,	6	13,700				15	21		8,067	11,580	84,700
Window Glass. *With Glass*,											
Window Shades,	12	67,800	1	8	7	60	28	10	42,110	46,530	157,513
Window Screens,	1	15,000				5			3,000	6,500	10,918
Wire Mills,	2	62,000	2	40	30	29			8,200	45,231	62,100
Wire Workers,	9	74,400	1	6	29	70	1	14	37,252	75,504	160,158
Wooden and Willow Wares,	7	71,200	1	20	29	73		5	35,940	60,934	165,785
Wood Turners, Carvers, Moulders, &c.,	35	161,502	29	235	455	280	6	29	147,161	88,239	370,330

KINDS OF MANUFACTURE.	No. of Estab's.	CAPITAL.	Using Steam.	Horse Power.	GENERAL Sets.	GENERAL Cards.	MACHINERY. Spindles.	MACHINERY. Looms.	MACHINERY. Combs.	HANDS EMPLOYED. Men.	HANDS EMPLOYED. Females.	HANDS EMPLOYED. Youths.	WAGES.	MATERIALS.	PRODUCTION.
Woollen Manufactures; Wools, Pulled and Scoured,	5	$80,000	1	50						52			$20,620	$291,600	$366,625
Wool Yarns,	27	977,000	27	802	91	273	28,932			334	281	233	349,804	2,067,705	3,406,690
Wool Cloths, Doeskins, Water Proofs,	14	853,300	15	484	24	70	7,390	677		314	404	106	296,700	995,350	1,626,343
Wool Coatings, Heavy,	4	1,195,000	8	360	19	57	6,000	145		212	128	46	160,000	628,500	1,061,009
Wool Blankets, Chiefly White,	5	2,520,000	8	505	57	171	18,700	359		518	276	170	376,049	1,359,000	2,299,200
Woollen Shawls,	22	791,600	17	245	2	6	600	459		394	500	184	424,876	1,114,590	1,832,550
Woollen and Cotton Linseys Flannels,	39	1,925,000	36	1,141	66	199	28,760	2,228		724	1,179	260	669,400	2,198,213	3,846,249
Wool and Cotton Balmorals,	9	224,750	9	137	5	15	2,200	347		139	375	52	131,100	538,475	1,341,750
Wool and Cotton Carpet Yarns,	7	117,000	7	190	13	39	4,792			89	25	22	52,650	140,023	224,552
Wool and Worsted Shawls, &c. *With Hosiery*,	10														600,000
Worsted Yarns,*	9	1,045,000	9	387	19	57	10,340		16	217	250	195	250,550	1,445,450	2,028,500
Worsted and Cotton Braids and Webbings,	8	723,000	30	326	2	6	1,096			147	560	385	188,440	498,542	893,320
Worsted Dress Goods,	4	810,000	10	585		18	3,200	826	4	262	403	171	552,000	1,587,700	†3,569,900
Worsted Zephyr Work,	3	4,600								8	39	23	7,100	10,000	24,000
Worsted Reps and Terry,	3	110,000	2	49				81		42	94	15	74,612	290,358	390,200
Worsted and Woollen Hosiery,‡	48	3,845,000	21	514	24	72	6,520			957	2,490	643	1,103,941	2,571,683	4,439,315
Unclassified,	117	671,314	11	80				130		633	130	52	393,503	652,343	1,666,534
Aggregate in the City of Phila.,	8,339	$185,000,357	1,877	49,674			48,777			92,112	35,478	10,286	$61,948,874	$181,261,223	$334,852,458

* A large share of the worsted spun goes into what can only be classed as "Hosiery and Knit Goods," in Fine Knit Scarfs, Shawls, &c. The value in Shawls can only be estimated.

† 3,818,720 yards.

‡ This Summary includes all "Hosiery," Shawls, Knit Goods, &c , not entered with other Wool and Worsted items; much being pure wool or worsted, while the greater share has a small admixture of Cotton.

SUMMARY OF THE LEADING CLASSES OF MANUFACTURE.

The general tables previously given only imperfectly group the results of the Census so far as the aggregate values of the leading classes are concerned. The following is a partial summary of these leading classes:

Textile Fabrics.

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Steam Engines.	Horse Power.	GENERAL MACHINERY. Cards.	Spindles.	Looms.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	QUANTITIES.	PRODUCTION.
Cotton Manufactures.														
Cotton Laps and Yarns, .	16	$603,300	19	344	95	20,040		246	158	167	$165,270	$651,648	2,300,140 lbs.	$900,592
Cotton Prints and Print Cloths, ...	10	2,155,000	34	2,632	32	9,166	253	629	159	231	363,064	6,780,468	68,432,000 yds.	7,933,417
Cotton Checks and Ginghams, &c., ...	54	5,313,950	83	2,587	316	114,572	5,793	1,613	2,912	773	1,592,253	4,127,720	38,097,439 yds.	7,504,981
Cotton Hosiery, ...	27	339,100	16	147			226	237	438	281	242,878	548,561	Est. 800,000 lbs.	1,499,635
Cotton Cords, Webbing and Tapes, ...	5	462,000	7	106			383	99	375	252	112,916	247,020	Est. 250,000 lbs.	483,441
Summary, all Cotton,	112	$8,873,350	159	5,816	443	143,778	6,655	2,824	4,042	1,704	$2,476,381	$12,355,417	106,529,439 yds. 3,350,140 lbs.	$18,322,066
Cotton Mixed Yarns, . .	7	117,000	7	190	39	4,792		89	25	22	52,650	140,023	720,944 lbs.	224,552
Cotton and Woollen Mixed Piece Goods, Linceys, &c., ...	38	1,925,000	66	1,141	198	28,760	2,228	724	1,179	260	669,400	2,198,219	16,232,022 yds.	3,846,249
Cotton Mixed Balmorals and Coverlets, . . .	23	417,870	19	182	18	2,200	2,347	139	275	52	131,100	428,475	1,900,900 No.	1,341,750
Cotton and Woollen Hosiery, ...	14	589,400	9	168	40	2,490	243	173	304	116	187,850	480,401	751,000 lbs.	865,666
Summary, Cotton Mixed,	82	$3,049,270	91	1,681	295	38,242	4,818	1,125	1,783	350	$1,041,000	$3,257,118	23,824,822 yds. 1,470,944 lbs.	$6,278,217

KINDS OF MANUFACTURE	No. of Establishments.	CAPITAL.	Using Steam.	Horse. Power.	Sets Mach'y.	Wool Cards.	Spindles.	MACHINERY. Looms.	Total.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Woolen and Worsted Manufactures.															
Wools Scoured, ...	5	$80,000	1	50						52			$20,620	$291,600	$366,625
Wool Yarns, ...	27	977,000	27	802	91	273	28,932			334	281	233	349,804	2,067,705	3,406,690
Wool Cloths and Coatings,	18	2,048,300	23	844	43	127	13,390	822		526	532	152	456,700	1,628,350	2,687,352
Wool Blankets, ...	7	2,520,500	5	560	57	171	18,700	359		482	279	118	368,800	1,360,000	2,308,100
Woollen Shawls, ...	22	791,600	17	245	2	6	600	459		394	500	184	424,876	1,114,590	1,832,550
Worsted Yarns, ...	9	1,045,000	9	387	16	57	10,340			217	250	195	220,550	1,445,450	2,028,500
Worsted and Wool Hosiery (including Worsted Shawls),	48	3,845,000	21	514	24	72	6,520	2,488		957	2,490	643	1,103,941	2,571,683	4,439,315
Worsted Dress Goods, . .	4	810,000	10	585	4	18	3,200	826		262	403	171	552,000	1,587,700	3,569,900
Worsted Reps and Terry, .	3	110,000	2	49				81		42	94	15	74,612	290,358	390,200
Worsted Zephyr, Braids, &c.,	11	727,600	30	326	2	6	1,096	985		155	599	408	195,540	508,542	917,320
Carpets, Wool and Worsted,	239	3,255,500	18	463				3,254		3,424	848	321	1,948,527	5,549,472	9,961,075
Total Wool and Worsted Manufactured (not clothing, and not included in Cotton Mixed,)	393	$25,810,500	163	4,825	239	724	82,778	5,803		6,745	1,376	729	$5,715,970	$18,414,850	$31,907,627
Hemp and Jute Manufactures.															
Carpets, Sackings, and Yarns,	3	130,000	3	64			1,280	73		45	101	20	63,130	189,025	300,179
Total Textile Fabrics (other than Silk), ...	590	$37,863,120	416	12,386		1,462	266,078	17,349		10,739	7,302	2,803	$8,296,481	$34,216,410	$56,808,089

Iron and Steel Manufactures.

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Steam Engines.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Youths.	WAGES.	MATERIALS.	PRODUCTION
Iron Manufactures.										
Cast Work. General Castings,	43	$1,019,584	33	404	109	985	18	$538,019	$691,107	$1,834,525
Car Wheels,	1	600,000	1	50	35	157	63	104,091	590,500	839,000
Malleable,	2	220,000	2	110	77	213		142,200	122,500	350,000
One-half of Heaters and Ranges,	17	378,540	2	24	22	201	3	154,277	249,628	714,503
Two-thirds of Stoves and Hollow Ware,	16	1,717,200	7	170	76	718	53	647,730	443,186	1,401,800
One-eighth of Machinery,	12	1,613,207	11	384	372	737	7	460,483	592,000	1,424,220
One-half Railings,	4	94,750	3	24	17	77		50,167	38,000	150,905
Copying and Seal Presses,	4	17,700	3	28	25	18	1	14,070	13,620	42,085
Values of Cast Work Finished,	99	$5,660,981	62	1,194	733	3,106	145	$2,111,037	$2,740,541	$6,757,038
Actual Foundries, with estimate of crude products,	59	$3,200,000	22	450	88	450		$330,000	$3,039,913	$3,750,000
Wrought Iron Work.										
Rolling Mill Products, Bar Plate, Rod and Sheet,	9	2,033,100	44	3,190	324	1,310	20	904,348	2,543,770	3,976,492
Sheet, Galvanized, &c.,	5	279,000	5	88	55	131	5	82,950	448,796	794,526
Pipe, Wrought,	4	2,750,000	14	985	462	765	20	448,200	1,604,525	3,055,760
Locomotives and Boilers,	17	3,106,812	15	558	563	1,917	20	1,447,440	2,245,207	4,513,276
Seven-eighths of Machinery,	82	11,292,449	78	2,692	2,602	5,158	55	3,223,384	4,143,515	9,969,525
Stoves, Heaters and Ranges. (Not included above),	25	1,237,140	5	109	60	560	30	478,142	471,221	1,415,403
Railings,	5	94,750	3	23	17	76		50,166	38,912	150,904
Safes, Doors, Shutters,	8	190,900	4	53	30	138	1	95,010	90,737	331,743
Nails and Spikes,	10	60,350	2	60	26	77		46,788	95,222	278,028

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Steam Engines.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Wrought Iron Work—Continued.										
Chains and Cables,	3	$16,300	1	10	10	21	15	$12,800	$104,100	$134,172
Wire, and Manufacturers of Wire,	10	89,400	2	12	34	80	15	45,250	90,504	190,158
Blacksmiths,	139	210,510	4	12	198	325	8	329,713	105,264	467,469
Ship Smiths,	19	46,900	2	16	19	36		20,302	18,351	62,260
Screws, Scales and Balances,	10	90,500	4	21	37	72	18	42,249	42,969	199,560
Hoes, Shovels and Spades,	10	171,400	13	267	130	1,105	95	662,481	720,407	2,199,901
Miscellaneous, Wrought,	15	133,000	10	41	60	121	3	63,000	125,000	218,000
Total values, Wrought,	361	$21,804,511	206	8,137	4,627	11,892	305	$7,952,223	$12,888,500	$27,957,277
Total Iron Man'fs, Wrought and Cast,	460	27,465,492	268	9,331	5,360	14,998	450	10,063,260	15,629,041	34,714,315

Notes of Iron Manufacture.

The following are the quantities of materials used and products made, as near as can be determined:

1. FOUNDRIES—

Number of Cupola Furnaces,	88	Tons of Scrap Iron used,	3,450
Tons of Pig Iron used,	70,623	Tons of Castings made,	70,250

2. ROLLING MILLS—

Trains of Rolls,	35	Number of Steam Engines; (48 horse power),	3,245
Puddling and Heating Furnaces,	101	Tons of Bar and Rod Iron made,	32,956
Tons of Ore used,	6,900	Tons of Sheet Iron rolled,	7,108
Tons of Blooms used,	3,850	Tons of Plate Iron rolled,	5,000
Tons of Pig Iron used,	32,400	Locomotives manufactured,	269
Tons of Old Rails and Scrap,	12,080		

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Steam Engines.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
STEEL MANUFACTURES.											
Cast Steel,	6	$1,500,000	16	1,105	107	530		10	$293,282	$984,357	$1,908,250
Steel, Rolled and Forged,	5	668,000	12	700	86	219			150,572	831,770	1,395,000
Steel Springs,	9	1,163,000	5	95	90	134		1	74,602	254,289	592,663
Steel Saws,	8	628,800	6	385	304	478	2	48	369,411	409,243	892,260
Steel Tools (Fork and Edge),	17	298,100	16	220	259	239	2	93	145,485	159,249	479,350
Cutlery,	15	90,350	12	82	148	113	4	3	49,458	34,406	229,880
Surgical and Dental Instruments,	14	434,400	8	44	64	158	22	17	120,475	68,599	267,779
Files, &c.,	15	142,500	4	70	78	112	38	42	51,863	63,332	173,890
Summary of Steel,	89	$4,976,150	79	2,701	1,136	1,983	68	214	$1,255,148	$2,805,245	$5,939,072
Summary of Iron and Steel,	549	32,450,642	347	12,032	6,496	16,981	68	664	11,318,408	18,434,286	40,653,387

Trains of Steel Rolls, 9; Steel Furnaces, 37; Tons of Steel made, 6,550.

CLOTHING AND APPAREL; WITH COMPARISONS, 1870 WITH 1860.

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Using Steam.	Horse Power.	MACHINERY.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Mens and Boys' Clothing,	420	$6,570,794			2,773	5,241	5,954	59	$3,011,760	$7,096,780	$13,675,451
Collars, Shirts and Furnishing Goods,	81	1,034,100	5	54	822	170	2,044	70	535,630	1,354,600	2,535,374
Cloaks and Mantillas,	72	494,083			166	60	658	15	227,394	387,287	1,010,992
Millinery and Straw Goods (Wholesale only),	10	196,000			38	43	489	7	96,645	138,705	372,150
Millinery and Dressmaking,	70	119,450			16	6	206	10	55,993	96,642	242,904
Totals, Clothing Proper,	653	$8,414,427	5	54	3,815	5,520	9,351	161	$3,927,423	$9,074,014	$17,836,871
Hats, Wool, Silk and Fur,	40	543,850	7	86	76	555	316	29	435,857	523,273	1,466,452
Caps, of Cloth,	15	92,650			46	40	124		66,223	140,119	224,056
Boots and Shoes, all Kinds,	845	3,879,381	13	74	1,633	5,745	2,273	299	3,463,244	4,467,914	10,569,353
Fur Manufactures,	41	581,450			12	107	265	10	105,251	430,068	841,898
Gloves, Kid and Buckskin,	3	5,800			5	13	12	2	9,764	3,660	30,990
Corsets, Shirts, &c.,	18	53,450			30	11	71	4	22,320	34,650	82,660
Umbrellas and Parasols,	24	1,023,882	2	28	721	273	1,013	51	349,160	1,102,450	2,098,126
Total Clothing and Articles of Personal Wear,	1,640	$14,594,890	27	242	2,528	12,264	13,425	546	$8,379,242	$15,776,148	$33,250,406

To these should be added a large share of the Hosiery and Shawl Manufacture, including Balmorals, viz.: Hosiery, Cotton and Woollen, $5,938,950; Shawls (not with Hosiery), $1,832,550; Balmoral Skirts, $1,341,750. Total, $9,113,250. And making the total of this entire Class, $42,353,656, against $23,758,546 for precisely the same articles in 1860; an increase of $18,595,110.

The comparison of the aggregate values of Textile Fabrics with 1860, shows, on Cottons and Cotton Mixed Goods, $24,600,283 now, as against, $13,543,127 then; a gain of $11,057,226. And on Woollens and Worsteds, including Carpets, $31,907,627 now, as against $7,085,988 in 1860; a gain of $24,811,639. The entire gain, *on Woollen and Cotton Goods alone,* is therefore **$35,868,865.**

Printing and Publishing.

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Steam Engines.	Horse Power.	PRESSES.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Newspapers,	43	$3,472,000	28	399	121	1,199	20	35	$1,142,959	$1,375,333	$4,297,173
Book Publishers,	46	3,271,202	10	71	181	755	302	47	622,914	1,527,850	4,193,485
Book Binders,	36	424,075	11	65	257	348	408	62	282,901	291,709	800,414
Blank Books,	17	354,000	4	40	143	189	202	48	139,560	283,471	685,120
Book and Job Printers,	99	1,518,730	39	292	578	990	135	149	688,309	740,821	2,176,342
Plate Printers,	7	53,900			63	58	4		28,976	26,682	327,500
Music Publishers,	6	270,500			20	29		8	24,350	84,000	229,500
Totals,	254	$9,364,407	92	867	1,363	4,568	1,071	349	$2,929,969	$4,329,866	$12,709,534

The number of volumes of books published in 1870, was 5,384,153. Comparing the production of 1860 with that of 1870, the several items are each almost exactly twice as great in 1870, the Totals being $12,709,534 in 1870, against $6,441,403 in 1860.

GENERAL COMPARISONS: MANUFACTURES NEAR PHILADELPHIA.

In the immediate vicinity of Philadelphia a series of Manufacturing Villages exist, the products of which belong exclusively to this City; the Capital being owned here, and the goods sold here. An estimate based to a great extent on the official returns of the Census of 1870, gives an approximate account of these, as follows:

KINDS OF MANUFACTURE.	No. of Establishments.	CAPITAL.	Steam Engines.	Horse Power.	HANDS EMPLOYED. Men.	Females.	Youths.	WAGES.	MATERIALS.	PRODUCTION.
Cotton Manufactures,	63	$4,693,880	65	1,200	1,550	2,883	350	$1,550,000	$3,155,074	$5,888,704
Cotton Mixed Goods,	58	1,630,600	35	980	955	1,350	225	955,000	1,770,000	3,649,234
All Wool Manufactures,	30	2,615,800	45	1,050	858	935	158	1,021,000	2,453,000	4,743,000
Iron Manufactures,	55	5,350,000	85	2,500	3,500		50	2,020,000	3,380,000	7,776,302
Paper Mills,	10	1,500,000	20	400	256	84		175,000	387,000	1,225,000
Chemicals, Metals, Fertilizers, &c.,	18	2,750,000	30	900	980	30		658,000	1,100,000	3,150,000
Glass Wares,	6	800,000	20	600	450		60	320,000	375,000	1,200,000
Totals, Near Philadelphia,	240	$19,340,280	300	7,630	8,549	5,282	843	$6,699,000	$12,620,074	$27,632,240
In the City,	8,339	185,000,357	1,877	49,674	92,112	35,478	10,286	61,948,874	181,261,223	334,852,458
In City and Vicinity,	8,579	$204,340,637	2,177	57,304	100,661	40,760	11,129	$68,647,874	$193,861,297	$362,484,698
In the City in 1860,	6,298	73,087,852			68,350	39,633		27,369,254	69,562,206	135,979,777
City and Vicinity in 1860,	6,451	81,608,502			75,495	32,396		29,459,300	74,664,000	147,286,437
Increase in City in 1870,	2,041	$111,912,505			23,762	5,845	10,286	$34,579,620	$111,699,017	$198,872,681

The *increase alone*, in the City of Philadelphia, is *one and a half times the Total value* of manufactured products in 1860. The apparent discrepancy as regards the increase of Youths, or persons under sixteen, in 1870, results simply from the fact that all were classed as Males and Females in 1860. Most of these young persons are Females, making the number of Females 16,131 more in 1870 than in 1860.

3 1198 02421 9623
N/1198/02421/9623X